



**STATE OF TENNESSEE
DEPARTMENT OF HEALTH
ENVIRONMENTAL LABORATORIES**

TDH: Lab Services JRL
Lab Services - Jackson Regional Lab
Jackson, TN 38301
731-426-0686

TDH: Lab Services KRL
Lab Services - Knoxville Regional Lab
Knoxville, TN 37920
865-549-5201

TDH: Lab Services NCL
Lab Services - Nashville Central Lab
Nashville, TN 37243
615-262-6300

Sent To: Greg Denton
TDEC-WPC
6th Floor, L & C Tower Annex
401 Church Street
Nashville, TN 37243-1534

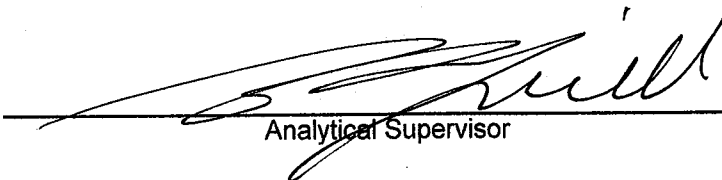
Michael Atchley
TDEC-WPC
Knoxville FO
3711 Middlebrook Pike
Knoxville, TN 37921

Lab ID: K00002659
Knoxville Regional Laboratory

Sampling Agency: TDEC: Division of Water Pollution Control

Billing Code: 327.34-20

This is to certify that the following results were determined using
good laboratory practices and in accordance with federal or state
approved methodologies.


Analytical Supervisor

Lab-Sample Number: K00002659001
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 12.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 1
Station No.: EMORY012.1RO
Date/Time Collected: 07/28/2009 11:52
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations
pH: 7.80 pH Units
Chlorine, residual:
Conductivity: 96 uMHO
Temperature: 25.52
Dissolved Oxygen: 7.32 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	23	mg/L	3.8	10	M Chen	8/4/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	22	mg/L	0.7	1	M Chen	8/4/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	7/29/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	7/31/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002659002
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 2.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 2
Station No.: EMORY002.1RO
Date/Time Collected: 07/28/2009 09:52
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations

pH: 7.57 pH Units
Chlorine, residual:
Conductivity: 135 uMHO
Temperature: 26.72
Dissolved Oxygen: 7.92 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	34	mg/L	3.8	10	M Chen	8/4/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	30	mg/L	0.7	1	M Chen	8/4/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	7/29/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	10	mg/L	10	10	A Peeples	7/31/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: K00002659003
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.9 at underwater weir
Sampler Project Name: TVA Ash Spill
Project Site No.: 2B
Station No.: EMORY001.9RO
Date/Time Collected: 07/28/2009 10:09
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations
pH: 7.46 pH Units
Chlorine, residual:
Conductivity: 138 uMHO
Temperature: 26.95
Dissolved Oxygen: 7.27 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	92	mg/L	3.8	10	M Chen	8/4/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	78	mg/L	0.7	1	M Chen	8/4/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	7/29/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	13	mg/L	10	10	A Peoples	7/31/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002659004
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.7
Sampler Project Name: TVA Ash Spill
Project Site No.: 3
Station No.: EMORY001.7RO
Date/Time Collected: 07/28/2009 10:18
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations
pH: 7.91 pH Units
Chlorine, residual:
Conductivity: 168 uMHO
Temperature: 26.98
Dissolved Oxygen: 8.17 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	92	mg/L	3.8	10	M Chen	8/4/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	72	mg/L	0.7	1	M Chen	8/4/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	7/29/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	10	mg/L	10	10	A Peoples	7/31/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002659005
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 0.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 4
Station No.: EMORY000.1RO
Date/Time Collected: 07/28/2009 10:29
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations
pH: 8.70 pH Units
Chlorine, residual:
Conductivity: 261 uMHO
Temperature: 27.26
Dissolved Oxygen: 11.27 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	98	mg/L	3.8	10	M Chen	8/4/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	82	mg/L	0.7	1	M Chen	8/4/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	7/29/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	7/31/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002659006
Project Name: TVA-Ash Spill
Sample Description: Clinch River mile 2.3
Sampler Project Name: TVA Ash Spill
Project Site No.: 5
Station No.: CLINC002.3RO
Date/Time Collected: 07/28/2009 10:48
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations
pH: 8.57 pH Units
Chlorine, residual:
Conductivity: 252 uMHO
Temperature: 28.08
Dissolved Oxygen: 9.70 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	92	mg/L	3.8	10	M Chen	8/4/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	74	mg/L	0.7	1	M Chen	8/4/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	7/29/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	7/31/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002659007
Project Name: TVA-Ash Spill
Sample Description: Clinch River mile 2.3 -Duplicate
Sampler Project Name: TVA Ash Spill
Project Site No.: 5FD
Station No.: CLINC002.3RO-FD
Date/Time Collected: 07/28/2009 10:48
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations
pH: 8.52 pH Units
Chlorine, residual:
Conductivity: 252 uMHO
Temperature: 28.08
Dissolved Oxygen: 9.70 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	89	mg/L	3.8	10	M Chen	8/4/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	73	mg/L	0.7	1	M Chen	8/4/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	7/29/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	7/31/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002659008
Project Name: TVA-Ash Spill
Sample Description: Clinch River mile 2.3-Field Blank
Sampler Project Name: TVA Ash Spill
Project Site No.: 5FB
Station No.: CLINC002.3RO-FB
Date/Time Collected: 07/28/2009 10:48
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	U	mg/L	3.8	10	M Chen	8/4/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	U	mg/L	0.7	1	M Chen	8/4/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	7/31/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002659009
Project Name: TVA-Ash Spill
Sample Description: Clinch River TVA Discharge Point
Sampler Project Name: TVA Ash Spill
Project Site No.: 5A
Station No.: KingAshOutF2
Date/Time Collected: 07/28/2009 11:00
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations
pH: 7.79 pH Units
Chlorine, residual:
Conductivity: 251 uMHO
Temperature: 28.06
Dissolved Oxygen: 7.00 mg/L
Other:
Flow: CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	82	mg/L	3.8	10	M Chen	8/4/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	70	mg/L	0.7	1	M Chen	8/4/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	7/29/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	13	mg/L	10	10	A Peebles	7/31/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number:	K00002659010	Field Determinations	
Project Name:	TVA-Ash Spill	pH:	8.53 pH Units
Sample Description:	Clinch River mile 4.5 near Sugar Grove Valley R	Chlorine, residual:	
Sampler Project Name:	TVA Ash Spill	Conductivity:	266 uMHO
Project Site No.:	6	Temperature:	26.84
Station No.:	CLINC004.5RO	Dissolved Oxygen:	10.22 mg/L
Date/Time Collected:	07/28/2009 11:15	Other:	
Sampler's Name:	Geoff Klein	Flow:	CFS
County:	ROANE - 73		
Sample Matrix:	Water		
EFO:	Knoxville		
Sampling Agency:	TDEC-WPC		
Billing Code:	327.34-20		
Send Report To:	TDEC-WPC		
Agency Invoiced:	TDEC-WPC		
Priority Date:			
Date/Time Received:	07/28/2009 13:10		
Received By:	E McCrary		

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	110	mg/L	3.8	10	M Chen	8/4/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	86	mg/L	0.7	1	M Chen	8/4/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	7/29/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peeples	7/31/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected



**STATE OF TENNESSEE
DEPARTMENT OF HEALTH
ENVIRONMENTAL LABORATORIES**

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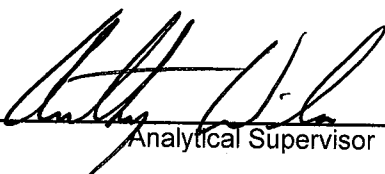
Michael Atchley
TDEC-WPC
Knoxville FO
3711 Middlebrook Pike
Knoxville, TN 37921

Lab ID: K00002659
Knoxville Regional Laboratory

Sampling Agency: TDEC: Division of Water Pollution Control

Billing Code: 327.34-20

This is to certify that the following results were determined using
good laboratory practices and in accordance with federal or state
approved methodologies.



Analytical Supervisor

Lab-Sample Number: K00002659001
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 12.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 1
Station No.: EMORY012.1RO
Date/Time Collected: 07/28/2009 11:52
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations
pH: 7.80 pH Units
Chlorine, residual:
Conductivity: 96 uMHO
Temperature: 25.52
Dissolved Oxygen: 7.32 mg/L
Other:
Flow: CFS

TEST: Digestion Metals			METHOD: EPA 200.2			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	07/30/2009				W Frye	7/30/2009

TEST: ICP			METHOD: EPA 200.7			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	190	µg/L	2.9	10	S Ufegbu	8/4/2009

TEST: ICP-MS			METHOD: EPA 200.8			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	64	µg/L	6.4	10	M Pattanayek	7/31/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	7/31/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	7/31/2009
Barium	28	µg/L	2.5	5	M Pattanayek	7/31/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	7/31/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	7/31/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	8/4/2009
Cobalt	0.17J	µg/L	0.04	1	M Pattanayek	7/31/2009
Copper	1.4	µg/L	0.38	1	M Pattanayek	7/31/2009
Lead	0.21J	µg/L	0.10	1	M Pattanayek	7/31/2009
Manganese	46	µg/L	0.42	1	M Pattanayek	7/31/2009
Nickel	0.70J	µg/L	0.25	1	M Pattanayek	7/31/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	7/31/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	7/31/2009
Thallium	0.079J	µg/L	0.03	1	M Pattanayek	7/31/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	8/1/2009
Zinc	4.3J	µg/L	1.9	5	M Pattanayek	7/31/2009

Lab-Sample Number: K00002659001
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 12.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 1
Station No.: EMORY012.1RO
Date/Time Collected: 07/28/2009 11:52
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations

pH: 7.80 pH Units
Chlorine, residual:
Conductivity: 96 uMHO
Temperature: 25.52
Dissolved Oxygen: 7.32 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.06J	µg/L	0.029	0.2	A Bass	8/4/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: K00002659002
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 2.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 2
Station No.: EMORY002.1RO
Date/Time Collected: 07/28/2009 09:52
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations
pH: 7.57 pH Units
Chlorine, residual:
Conductivity: 135 uMHO
Temperature: 26.72
Dissolved Oxygen: 7.92 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	07/30/2009				W Frye	7/30/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	150	µg/L	2.9	10	S Ufegbu	8/4/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	120	µg/L	6.4	10	M Pattanayek	7/31/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	7/31/2009
Arsenic	2.7J	µg/L	0.93	5	M Pattanayek	8/4/2009
Barium	41	µg/L	2.5	5	M Pattanayek	7/31/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	7/31/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	7/31/2009
Chromium	2.3J	µg/L	2.0	5	M Pattanayek	8/3/2009
Cobalt	0.30J	µg/L	0.04	1	M Pattanayek	7/31/2009
Copper	0.76J	µg/L	0.38	1	M Pattanayek	7/31/2009
Lead	0.27J	µg/L	0.10	1	M Pattanayek	7/31/2009
Manganese	76	µg/L	0.42	1	M Pattanayek	7/31/2009
Nickel	0.90J	µg/L	0.25	1	M Pattanayek	7/31/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	7/31/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	7/31/2009
Thallium	1.3	µg/L	0.03	1	M Pattanayek	7/31/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	8/4/2009
Zinc	2.6J	µg/L	1.9	5	M Pattanayek	7/31/2009

Lab-Sample Number: K00002659002
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 2.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 2
Station No.: EMORY002.1RO
Date/Time Collected: 07/28/2009 09:52
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations

pH: 7.57 pH Units
Chlorine, residual:
Conductivity: 135 uMHO
Temperature: 26.72
Dissolved Oxygen: 7.92 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	8/4/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: K00002659003
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.9 at underwater weir
Sampler Project Name: TVA Ash Spill
Project Site No.: 2B
Station No.: EMORY001.9RO
Date/Time Collected: 07/28/2009 10:09
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations
pH: 7.46 pH Units
Chlorine, residual:
Conductivity: 138 uMHO
Temperature: 26.95
Dissolved Oxygen: 7.27 mg/L
Other:
Flow: CFS

TEST: Digestion Metals			METHOD: EPA 200.2			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	07/30/2009				W Frye	7/30/2009

TEST: ICP			METHOD: EPA 200.7			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	140	µg/L	2.9	10	S Ufegbu	8/4/2009

TEST: ICP-MS			METHOD: EPA 200.8			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	150	µg/L	6.4	10	M Pattanayek	7/31/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	7/31/2009
Arsenic	2.8J	µg/L	0.93	5	M Pattanayek	8/4/2009
Barium	50	µg/L	2.5	5	M Pattanayek	7/31/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	7/31/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	7/31/2009
Chromium	2.6J	µg/L	2.0	5	M Pattanayek	8/3/2009
Cobalt	0.29J	µg/L	0.04	1	M Pattanayek	7/31/2009
Copper	3.0	µg/L	0.38	1	M Pattanayek	7/31/2009
Lead	0.38J	µg/L	0.10	1	M Pattanayek	7/31/2009
Manganese	71	µg/L	0.42	1	M Pattanayek	7/31/2009
Nickel	1.1	µg/L	0.25	1	M Pattanayek	7/31/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	7/31/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	7/31/2009
Thallium	0.50J	µg/L	0.03	1	M Pattanayek	7/31/2009
Vanadium	6.2	µg/L	3.4	5	M Pattanayek	8/4/2009
Zinc	4.7J	µg/L	1.9	5	M Pattanayek	7/31/2009

Lab-Sample Number: K00002659003
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.9 at underwater weir
Sampler Project Name: TVA Ash Spill
Project Site No.: 2B
Station No.: EMORY001.9RO
Date/Time Collected: 07/28/2009 10:09
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations
pH: 7.46 pH Units
Chlorine, residual:
Conductivity: 138 uMHO
Temperature: 26.95
Dissolved Oxygen: 7.27 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	8/4/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number: K00002659004
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.7
Sampler Project Name: TVA Ash Spill
Project Site No.: 3
Station No.: EMORY001.7RO
Date/Time Collected: 07/28/2009 10:18
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations
pH: 7.91 pH Units
Chlorine, residual:
Conductivity: 168 uMHO
Temperature: 26.98
Dissolved Oxygen: 8.17 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	07/30/2009				W Frye	7/30/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	U	µg/L	2.9	10	S Ufegbu	8/4/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	110	µg/L	6.4	10	M Pattanayek	7/31/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	7/31/2009
Arsenic	5.2	µg/L	0.93	5	M Pattanayek	8/4/2009
Barium	53	µg/L	2.5	5	M Pattanayek	7/31/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	7/31/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	7/31/2009
Chromium	2.1J	µg/L	2.0	5	M Pattanayek	7/31/2009
Cobalt	0.22J	µg/L	0.04	1	M Pattanayek	7/31/2009
Copper	2.3	µg/L	0.38	1	M Pattanayek	7/31/2009
Lead	0.23J	µg/L	0.10	1	M Pattanayek	7/31/2009
Manganese	48	µg/L	0.42	1	M Pattanayek	7/31/2009
Nickel	0.87J	µg/L	0.25	1	M Pattanayek	7/31/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	7/31/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	7/31/2009
Thallium	0.31J	µg/L	0.03	1	M Pattanayek	7/31/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	8/4/2009
Zinc	2.2J	µg/L	1.9	5	M Pattanayek	7/31/2009

Lab-Sample Number: K00002659004
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 1.7
Sampler Project Name: TVA Ash Spill
Project Site No.: 3
Station No.: EMORY001.7RO
Date/Time Collected: 07/28/2009 10:18
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations
pH: 7.91 pH Units
Chlorine, residual:
Conductivity: 168 uMHO
Temperature: 26.98
Dissolved Oxygen: 8.17 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MLQ	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	8/4/2009

J - Estimated value between MDL and MLQ
MDL - Method Detection Limit
MLQ - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002659005
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 0.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 4
Station No.: EMORY000.1RO
Date/Time Collected: 07/28/2009 10:29
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations
pH: 8.70 pH Units
Chlorine, residual:
Conductivity: 261 uMHO
Temperature: 27.26
Dissolved Oxygen: 11.27 mg/L
Other:
Flow: CFS

TEST: Digestion Metals			METHOD: EPA 200.2			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	07/30/2009				W Frye	7/30/2009

TEST: ICP			METHOD: EPA 200.7			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	67	µg/L	2.9	10	S Ufegbu	8/4/2009

TEST: ICP-MS			METHOD: EPA 200.8			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	100	µg/L	6.4	10	M Pattanayek	7/31/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	7/31/2009
Arsenic	6.7	µg/L	0.93	5	M Pattanayek	8/3/2009
Barium	56	µg/L	2.5	5	M Pattanayek	7/31/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	7/31/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	7/31/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	8/3/2009
Cobalt	0.27J	µg/L	0.04	1	M Pattanayek	7/31/2009
Copper	2.5	µg/L	0.38	1	M Pattanayek	7/31/2009
Lead	0.27J	µg/L	0.10	1	M Pattanayek	7/31/2009
Manganese	43	µg/L	0.42	1	M Pattanayek	7/31/2009
Nickel	1.1	µg/L	0.25	1	M Pattanayek	7/31/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	7/31/2009
Silver	0.071J	µg/L	0.03	0.25	M Pattanayek	7/31/2009
Thallium	1.3	µg/L	0.03	1	M Pattanayek	7/31/2009
Vanadium	4.5J	µg/L	3.4	5	M Pattanayek	8/4/2009
Zinc	2.4J	µg/L	1.9	5	M Pattanayek	7/31/2009

Lab-Sample Number: K00002659005
Project Name: TVA-Ash Spill
Sample Description: Emory River mile 0.1
Sampler Project Name: TVA Ash Spill
Project Site No.: 4
Station No.: EMORY000.1RO
Date/Time Collected: 07/28/2009 10:29
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations
pH: 8.70 pH Units
Chlorine, residual:
Conductivity: 261 uMHO
Temperature: 27.26
Dissolved Oxygen: 11.27 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	8/4/2009

J - Estimated value between MDL and MQL
MDL - Method Detection Limit
MQL - Method Quantitation Limit
U - Undetected

Lab-Sample Number: K00002659006
Project Name: TVA-Ash Spill
Sample Description: Clinch River mile 2.3
Sampler Project Name: TVA Ash Spill
Project Site No.: 5
Station No.: CLINC002.3RO
Date/Time Collected: 07/28/2009 10:48
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations
pH: 8.57 pH Units
Chlorine, residual:
Conductivity: 252 uMHO
Temperature: 28.08
Dissolved Oxygen: 9.70 mg/L
Other:
Flow: CFS

TEST: Digestion Metals			METHOD: EPA 200.2			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	07/30/2009				W Frye	7/30/2009

TEST: ICP			METHOD: EPA 200.7			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	57	µg/L	2.9	10	S Ufegbu	8/4/2009

TEST: ICP-MS			METHOD: EPA 200.8			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	86	µg/L	6.4	10	M Pattanayek	7/31/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	7/31/2009
Arsenic	2.5J	µg/L	0.93	5	M Pattanayek	8/4/2009
Barium	44	µg/L	2.5	5	M Pattanayek	7/31/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	7/31/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	7/31/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	8/3/2009
Cobalt	0.18J	µg/L	0.04	1	M Pattanayek	7/31/2009
Copper	2.9	µg/L	0.38	1	M Pattanayek	7/31/2009
Lead	1.0	µg/L	0.10	1	M Pattanayek	7/31/2009
Manganese	29	µg/L	0.42	1	M Pattanayek	7/31/2009
Nickel	0.80J	µg/L	0.25	1	M Pattanayek	7/31/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	7/31/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	7/31/2009
Thallium	0.36J	µg/L	0.03	1	M Pattanayek	7/31/2009
Vanadium	4.0J	µg/L	3.4	5	M Pattanayek	8/4/2009
Zinc	3.3J	µg/L	1.9	5	M Pattanayek	7/31/2009

Lab-Sample Number: K00002659006
Project Name: TVA-Ash Spill
Sample Description: Clinch River mile 2.3
Sampler Project Name: TVA Ash Spill
Project Site No.: 5
Station No.: CLINC002.3RO
Date/Time Collected: 07/28/2009 10:48
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations

pH: 8.57 pH Units
Chlorine, residual:
Conductivity: 252 uMHO
Temperature: 28.08
Dissolved Oxygen: 9.70 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	8/4/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number: K00002659007
Project Name: TVA-Ash Spill
Sample Description: Clinch River mile 2.3 -Duplicate
Sampler Project Name: TVA Ash Spill
Project Site No.: 5FD
Station No.: CLINC002.3RO-FD
Date/Time Collected: 07/28/2009 10:48
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations
pH: 8.52 pH Units
Chlorine, residual:
Conductivity: 252 uMHO
Temperature: 28.08
Dissolved Oxygen: 9.70 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	07/30/2009				W Frye	7/30/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	56	µg/L	2.9	10	S Ufegbu	8/4/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	98	µg/L	6.4	10	M Pattanayek	7/31/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	7/31/2009
Arsenic	3.0J	µg/L	0.93	5	M Pattanayek	8/4/2009
Barium	52	µg/L	2.5	5	M Pattanayek	7/31/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	7/31/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	7/31/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	8/3/2009
Cobalt	0.20J	µg/L	0.04	1	M Pattanayek	7/31/2009
Copper	3.1	µg/L	0.38	1	M Pattanayek	7/31/2009
Lead	0.20J	µg/L	0.10	1	M Pattanayek	7/31/2009
Manganese	34	µg/L	0.42	1	M Pattanayek	7/31/2009
Nickel	1.0	µg/L	0.25	1	M Pattanayek	7/31/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	7/31/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	7/31/2009
Thallium	0.29J	µg/L	0.03	1	M Pattanayek	7/31/2009
Vanadium	5.2	µg/L	3.4	5	M Pattanayek	8/4/2009
Zinc	2.6J	µg/L	1.9	5	M Pattanayek	7/31/2009

Lab-Sample Number: K00002659007
Project Name: TVA-Ash Spill
Sample Description: Clinch River mile 2.3 -Duplicate
Sampler Project Name: TVA Ash Spill
Project Site No.: 5FD
Station No.: CLINC002.3RO-FD
Date/Time Collected: 07/28/2009 10:48
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations
pH: 8.52 pH Units
Chlorine, residual:
Conductivity: 252 uMHO
Temperature: 28.08
Dissolved Oxygen: 9.70 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.03J	µg/L	0.029	0.2	A Bass	8/4/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number: K00002659008
Project Name: TVA-Ash Spill
Sample Description: Clinch River mile 2.3-Field Blank
Sampler Project Name: TVA Ash Spill
Project Site No.: 5FB
Station No.: CLINC002.3RO-FB
Date/Time Collected: 07/28/2009 10:48
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

TEST: Digestion Metals			METHOD: EPA 200.2			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	07/30/2009				W Frye	7/30/2009

TEST: ICP			METHOD: EPA 200.7			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	U	µg/L	2.9	10	S Ufegbu	8/4/2009

TEST: ICP-MS			METHOD: EPA 200.8			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	U	µg/L	6.4	10	M Pattanayek	7/31/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	7/31/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	8/4/2009
Barium	U	µg/L	2.5	5	M Pattanayek	7/31/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	7/31/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	7/31/2009
Chromium	2.5J	µg/L	2.0	5	M Pattanayek	8/3/2009
Cobalt	U	µg/L	0.04	1	M Pattanayek	7/31/2009
Copper	U	µg/L	0.38	1	M Pattanayek	7/31/2009
Lead	U	µg/L	0.10	1	M Pattanayek	7/31/2009
Manganese	U	µg/L	0.42	1	M Pattanayek	7/31/2009
Nickel	U	µg/L	0.25	1	M Pattanayek	7/31/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	7/31/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	7/31/2009
Thallium	0.15J	µg/L	0.03	1	M Pattanayek	7/31/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	8/4/2009
Zinc	U	µg/L	1.9	5	M Pattanayek	7/31/2009

Lab-Sample Number: K00002659008
Project Name: TVA-Ash Spill
Sample Description: Clinch River mile 2.3-Field Blank
Sampler Project Name: TVA Ash Spill
Project Site No.: 5FB
Station No.: CLINC002.3RO-FB
Date/Time Collected: 07/28/2009 10:48
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	8/4/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: K00002659009
Project Name: TVA-Ash Spill
Sample Description: Clinch River TVA Discharge Point
Sampler Project Name: TVA Ash Spill
Project Site No.: 5A
Station No.: KingAshOutF2
Date/Time Collected: 07/28/2009 11:00
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations
pH: 7.79 pH Units
Chlorine, residual:
Conductivity: 251 uMHO
Temperature: 28.06
Dissolved Oxygen: 7.00 mg/L
Other:
Flow: CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	07/30/2009				W Frye	7/30/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	120	µg/L	2.9	10	S Ufegbu	8/4/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	150	µg/L	6.4	10	M Pattanayek	7/31/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	7/31/2009
Arsenic	4.3J	µg/L	0.93	5	M Pattanayek	8/4/2009
Barium	53	µg/L	2.5	5	M Pattanayek	7/31/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	7/31/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	7/31/2009
Chromium	3.0J	µg/L	2.0	5	M Pattanayek	8/3/2009
Cobalt	U	µg/L	0.04	1	M Pattanayek	7/31/2009
Copper	4.8	µg/L	0.38	1	M Pattanayek	7/31/2009
Lead	0.32J	µg/L	0.10	1	M Pattanayek	7/31/2009
Manganese	56	µg/L	0.42	1	M Pattanayek	7/31/2009
Nickel	1.1	µg/L	0.25	1	M Pattanayek	7/31/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	7/31/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	7/31/2009
Thallium	0.17J	µg/L	0.03	1	M Pattanayek	7/31/2009
Vanadium	5.7	µg/L	3.4	5	M Pattanayek	8/4/2009
Zinc	6.5	µg/L	1.9	5	M Pattanayek	7/31/2009

Lab-Sample Number: K00002659009
Project Name: TVA-Ash Spill
Sample Description: Clinch River TVA Discharge Point
Sampler Project Name: TVA Ash Spill
Project Site No.: 5A
Station No.: KingAshOutF2
Date/Time Collected: 07/28/2009 11:00
Sampler's Name: Geoff Klein
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-WPC
Billing Code: 327.34-20
Send Report To: TDEC-WPC
Agency Invoiced: TDEC-WPC
Priority Date:
Date/Time Received: 07/28/2009 13:10
Received By: E McCrary

Field Determinations
pH: 7.79 pH Units
Chlorine, residual:
Conductivity: 251 uMHO
Temperature: 28.06
Dissolved Oxygen: 7.00 mg/L
Other:
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	8/4/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected

Lab-Sample Number:	K00002659010	Field Determinations	
Project Name:	TVA-Ash Spill	pH:	8.53 pH Units
Sample Description:	Clinch River mile 4.5 near Sugar Grove Valley R	Chlorine, residual:	
Sampler Project Name:	TVA Ash Spill	Conductivity:	266 uMHO
Project Site No.:	6	Temperature:	26.84
Station No.:	CLINC004.5RO	Dissolved Oxygen:	10.22 mg/L
Date/Time Collected:	07/28/2009 11:15	Other:	
Sampler's Name:	Geoff Klein	Flow:	CFS
County:	ROANE - 73		
Sample Matrix:	Water		
EFO:	Knoxville		
Sampling Agency:	TDEC-WPC		
Billing Code:	327.34-20		
Send Report To:	TDEC-WPC		
Agency Invoiced:	TDEC-WPC		
Priority Date:			
Date/Time Received:	07/28/2009 13:10		
Received By:	E McCrary		

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	ML	ANALYZED BY:	DATE
Digestion Metals	07/30/2009				W Frye	7/30/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	ML	ANALYZED BY:	DATE
Iron	62	µg/L	2.9	10	S Ufegbu	8/4/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	ML	ANALYZED BY:	DATE
Aluminum	58	µg/L	6.4	10	M Pattanayek	7/31/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	7/31/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	8/4/2009
Barium	39	µg/L	2.5	5	M Pattanayek	7/31/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	7/31/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	7/31/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	8/3/2009
Cobalt	0.18J	µg/L	0.04	1	M Pattanayek	7/31/2009
Copper	1.7	µg/L	0.38	1	M Pattanayek	7/31/2009
Lead	0.20J	µg/L	0.10	1	M Pattanayek	7/31/2009
Manganese	26	µg/L	0.42	1	M Pattanayek	7/31/2009
Nickel	0.94J	µg/L	0.25	1	M Pattanayek	7/31/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	7/31/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	7/31/2009
Thallium	0.20J	µg/L	0.03	1	M Pattanayek	7/31/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	8/4/2009
Zinc	2.9J	µg/L	1.9	5	M Pattanayek	7/31/2009

Lab-Sample Number:	K00002659010	Field Determinations	
Project Name:	TVA-Ash Spill	pH:	8.53 pH Units
Sample Description:	Clinch River mile 4.5 near Sugar Grove Valley F	Chlorine, residual:	
Sampler Project Name:	TVA Ash Spill	Conductivity:	266 uMHO
Project Site No.:	6	Temperature:	26.84
Station No.:	CLINC004.5RO	Dissolved Oxygen:	10.22 mg/L
Date/Time Collected:	07/28/2009 11:15	Other:	
Sampler's Name:	Geoff Klein	Flow:	CFS
County:	ROANE - 73		
Sample Matrix:	Water		
EFO:	Knoxville		
Sampling Agency:	TDEC-WPC		
Billing Code:	327.34-20		
Send Report To:	TDEC-WPC		
Agency Invoiced:	TDEC-WPC		
Priority Date:			
Date/Time Received:	07/28/2009 13:10		
Received By:	E McCrary		

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	ML	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	8/4/2009

J - Estimated value between MDL and MQL
 MDL - Method Detection Limit
 MQL - Method Quantitation Limit
 U - Undetected